LISTING OF THE CLAIMS

Claim 1 (previously presented) An infrared reflective coated article comprising:

a substrate;

a dielectric layer sputter deposited over the substrate, the layer comprising a first zinc stannate film deposited over the substrate having zinc in weight percent range of equal to and greater than 10 and equal to and less than 90, and tin in the weight percent range of equal to and less than 90 and equal to and greater than 10, and an electrical enhancing film deposited over the zinc stannate film, the electrical enhancing film selected from the group of films consisting of zinc oxide, tin oxide film and a second zinc stannate film wherein the composition of the first zinc stannate film is at least about 5 weight percent different than the composition of the second zinc stannate film, and

an infrared reflective layer deposited on the dielectric layer,

a metal primer layer over the infrared reflective layer;

a second dielectric layer over the primer layer; and

a protective layer of at least two films selected from the group consisting of metal-containing films, which are from different transition metals of Groups 4, 5, 6, or 10 of the Periodic Table of Elements; and silicon-containing films; and metal and silicon films; and films of metal and metal-oxy materials; and films of metal and silicon oxy-materials; and films of silicon and metal-oxy materials; and films of silicon and silicon oxy-materials; and films of metal oxy and silicon oxy materials; where the oxy materials are selected from the group consisting of oxides and oxynitrides, and wherein the protective layer is in a position where it can perform the protective function for providing durability to the dielectric layer, infrared reflective layer, metal primer layer, and second dielectric layer.

Claim 2 (original) The coated article of claim 1 wherein the infrared reflective metal is silver and the silver is deposited on the zinc oxide, tin oxide film.

Claim 3 (previously presented) The coated article of claim 1 wherein the infrared reflective layer is a silver film and the silver film is deposited on the second zinc stannate film.

Claim 4 (previously presented) The coated article of claim 1 wherein the dielectric layer is a first dielectric layer and the infrared reflective layer is a first infrared reflective layer and further including:

a metal primer layer over the first infrared reflective layer;

a second dielectric layer over the primer layer and the protective layer is an overcoat over the second dielectric layer.

Claim 5 (original) The article of claim 4 wherein the second dielectric layer is a zinc stannate film having 10-90 weight percent zinc and 90-10 weight percent tin.

Claim 6 (previously presented) The article of claim 1 wherein the dielectric layer is a first dielectric layer and the infrared reflective layer is a first infrared reflective layer and further including:

a first metal primer layer over the first infrared reflective metal layer;

a second dielectric layer over the first primer layer;

a second infrared reflective layer over the second dielectric layer;

a second metal primer layer over the second infrared reflective layer;

a third dielectric layer over the second metal primer layer; and

the protective layer is over the third dielectric layer.

Claim 7 (original) The article of claim 6 wherein at least one of the second and third dielectric layers includes a zinc stannate film having 10-90 weight percent zinc and 90-10 weight percent tin.

Claim 8 (previously presented) The coating stack of claim 1 wherein the dielectric layer is a first dielectric layer and the infrared reflective layer is a first infrared reflective layer and further including:

a first metal primer layer over the first reflective layer;

a second dielectric layer over the first metal primer layer, the second dielectric layer comprising a first dielectric film and a zinc stannate film defined as a first zinc stannate film, the first zinc stannate film having zinc in the weight percent range of equal to and greater than 10 and equal to and less than 90 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 90, the second dielectric layer deposited over the first metal primer layer;

a second infrared reflective layer deposited over the second dielectric layer;

a second metal primer layer deposited over the second infrared reflective layer;

a third dielectric layer deposited over the second primer layer; and

the protective layer is over the third dielectric layer.

Claim 9 (original) The coating stack of claim 8 wherein the first dielectric film of the second dielectric layer comprises a zinc oxide film; a zinc oxide, tin oxide film or a zinc stannate film defined as a second zinc stannate film, the second zinc stannate film having a composition different than the composition of the first zinc stannate film of the second dielectric layer.

Claim 10 (original) The coating stack of claim 9 wherein the second zinc stannate film of the second dielectric layer has zinc in the weight percent

range of equal to and greater than 60 and equal to and less than 90 and tin in the weight percent of equal to and greater than 10 and equal to and less than 40, and the third dielectric layer is a zinc stannate film.

Claim 11 (original) The coating stack of claim 1 wherein the dielectric layer is a first dielectric layer and the infrared reflective layer is a first infrared reflective layer and further including:

a first metal primer layer over the first reflective layer;

a second dielectric layer over the first metal primer film;

a second infrared reflective layer over the second dielectric layer;

a second metal primer layer over the second infrared reflecting metal layer;

a third dielectric layer over the second metal primer layer, the third dielectric layer comprising a first dielectric film and a zinc stannate film defined as a first zinc stannate film, the first zinc stannate film having zinc in a weight percent with the range of equal to and greater than 10 and equal to and less than 90 and tin within the weight percent range of equal to and less than 90 and equal to and greater than 10, the third dielectric film deposited over the second metal primer; and

the protective layer overlies the third dielectric film.

Claim 12 (original) The article of claim 11 wherein the first dielectric film of the third dielectric layer is selected from the group consisting of a zinc oxide film; a zinc oxide, tin oxide film or a zinc stannate film defined as a second zinc stannate film, the second zinc stannate film having a composition different than the composition of the first zinc stannate film of third dielectric layer.

Claim 13 (original) The article of claim 12 wherein the second zinc stannate film of the third dielectric layer has zinc in the weight percent range of equal to

and greater than 60 and equal to and less than 90 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 40.

Claim 14 (original) The article of claim 1 wherein the dielectric layer is a first dielectric layer and the infrared reflective layer is a first infrared reflective layer and further including:

a first metal primer layer over the first reflective layer;

a second dielectric layer over the first metal primer layer, the second dielectric layer comprising a first dielectric film and a zinc stannate film defined as a first zinc stannate film, the first zinc stannate film having zinc in a weight percent within the range of equal to and greater than 10 and equal to and less than 90 and tin within the weight percent range of equal to and less than 90 and equal to and greater than 10, the second dielectric layer deposited over the first metal primer layer;

a second infrared reflective layer over the first zinc stannate film of the second dielectric layer;

a second metal primer layer over the second infrared reflective layer;

a third dielectric layer over the second metal primer layer, the third dielectric layer comprising a first dielectric film and a zinc stannate film defined as a first zinc stannate film, the first zinc stannate film having zinc in a weight percent within the range of equal to and greater than 10 and equal to and less than 90 and tin within the weight percent range of equal to and less than 90 and equal to and greater than 10, the third dielectric layer deposited over the second metal primer layer; and

the protective layer overlies the first zinc stannate film of the dielectric layer.

Claim 15 (original) The coating stack of claim 14 wherein the first dielectric film of the second dielectric layer and the first dielectric film of the third dielectric layer each has a film selected from the group consisting of zinc

oxide film; zinc oxide, tin oxide film or second zinc stannate film having a composition different than the composition of the first zinc stannate film in the respective same second or third dielectric layer.

Claim 16 (original) The coating stack of claim 15 wherein the second zinc stannate film of the first and second dielectric layer each include zinc in the weight percent range of equal to and greater than 60 and equal to and less than 90 and tin in the weight percent of equal to and greater than 10 and equal to and less than 40.

Claim 17 (original) The coating stack of claim 14 wherein the second dielectric layer further includes a third dielectric film over the first zinc stannate film of the second dielectric layer.

Claim 18 (original) The coating stack of claim 15 wherein the second dielectric layer further includes a third dielectric film over the first zinc stannate film of the second dielectric layer wherein the third dielectric film of the second dielectric layer is a film selected from the group consisting of zinc oxide film, zinc oxide, tin oxide film and a zinc stannate film defined as a third zinc stannate film, the third zinc stannate film has a composition different than the composition of the zinc stannate film of the second dielectric layer closest to the third zinc stannate film.

Claim 19 (original) The coating of claim 15 wherein the second dielectric film of the second dielectric layer and the second dielectric film of the third dielectric second layer each comprises a zinc oxide film; a zinc oxide, tin oxide film or a second zinc stannate film having a composition different than the composition of the first zinc stannate film of third dielectric layer.

Claim 20 (original) The coating stack of claim 19 wherein the first and third dielectric films of the second dielectric layer and the first dielectric film of the

third dielectric layer each include zinc in the weight percent range of equal to and greater than 60 and equal to and less than 90 and tin in the weight percent of equal to and greater than 10 and equal to and less than 40.

Claim 21 (previously presented) The coating stack of claim 17 wherein the substrate is a glass piece and the second zinc stannate film of the first dielectric layer is on the glass piece and has a thickness in the range of 230 ± 40 Angstroms Å; the first zinc stannate film of the first dielectric layer is on the second zinc stannate film of the first dielectric layer and has a thickness in the range of 80 ± 40Å; the first infrared reflective metal layer is a first silver film deposited on the first zinc stannate film of the first dielectric layer and has a thickness in the range of 110 ± 30Å, the metal primer layer is a titanium film deposited on the first silver layer and has a thickness in the range of 17-26Å; the first dielectric film of the second dielectric layer is deposited on the titanium film and has a thickness in the range of 80 ± 40Å; the first zinc stannate film of the second dielectric layer is deposited on the first dielectric film of the second dielectric layer and has a thickness in the range of 740 ± 40Å; the second infrared reflective metal layer is a second silver film deposited on the second dielectric film of the second dielectric layer and has a thickness in the range of 110 ± 38Å; the second primer film is a titanium film deposited on the second silver layer and having a thickness in the range of 18 - 31Å; the first dielectric film of the third dielectric layer is deposited on the second titanium film and has a thickness in the range of 80 ± 40Å; the first zinc stannate film layer of the third dielectric layer is deposited on the first dielectric film of the third dielectric layer and has a thickness in the range of 120 ± 40Å, and the protective layer is a titanium metal film deposited on the first zinc stannate film layer of the third dielectric layer and has a thickness in the range of 29 ± 3Å.

Claim 22 (previously presented) The coated article of claim 1 wherein the protective layer has at least two films selected from the group consisting of a

metal of titanium, zirconium, niobium, tantalum, chromium, nickel or alloys thereof; and a metal oxy material of titanium oxides, titanium oxynitride, zirconium oxides, zirconium oxynitrides, niobium oxides, niobium oxynitrides, tantalum oxide, tantalum oxynitride, chromic oxides, chromic oxynitrides, nickel oxide, or nickel oxynitride; and silicon oxide; and silicon dioxide; and silicon aluminum nitride and combinations and mixtures of any two or more of these.

Claim 23 (previously presented) A coated article comprising:

a substrate;

a first dielectric layer over the substrate;

a first infrared reflective layer over the first dielectric layer;

a first metal primer layer over the first infrared reflective layer;

a second dielectric layer over the first metal primer, the second dielectric layer having a first dielectric film selected from the group consisting of zinc oxide, tin oxide film and a first zinc stannate film, and a second dielectric film the second dielectric film having a composition different than the first dielectric film of the second dielectric layer;

a second infrared reflective layer over the second dielectric layer;

a second primer layer over the second reflective layer;

a third dielectric layer over the second metal primer layer; and

a protective layer of at least two films selected from the group consisting of metal-containing films, which are selected from different transition metals of Groups 4, 5, 6 or 10 of the Periodic Table of Elements; and silicon-containing films; and metal and silicon films; and films of metal and metal-oxy materials; and films of metal and silicon oxy-materials; and films of silicon and metal-oxy materials; and films of silicon and silicon oxy-materials; and films of metal oxy and silicon oxy materials, where the oxy-materials are oxides or oxynitrides and wherein the protective layer is in a

position where it can perform the protective function for providing durability to the dielectric layers, infrared reflective layers, and metal primer layers.

Claim 24 (original) The coated article of claim 23 wherein the first dielectric layer includes a zinc stannate film, the second dielectric film of the second dielectric layer is a zinc stannate film and the third dielectric layer includes a zinc stannate film, each of the zinc stannate films having zinc in the weight percent range of 10-90 and tin in the weight percent range of 90-10.

Claim 25 (original) The coated article of claim 24 wherein the first dielectric film of the second dielectric layer is the first zinc stannate film having zinc in the weight percent range of equal to and greater than 90 and equal to and less than 60 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 40.

Claim 26 (previously presented) A coated article comprising:

a substrate;

a first dielectric layer over the substrate;

a first infrared reflective layer over the first dielectric layer;

a first metal primer layer over the first infrared reflective layer;

a second dielectric layer over the first metal primer layer;

a second infrared reflective layer over the second dielectric layer;

a second metal primer layer over the second reflective metal layer;

a third dielectric layer having a first dielectric film selected from the group consisting of zinc oxide film; zinc oxide, tin oxide film and zinc stannate film, and a second dielectric film overlying the first dielectric film, the second dielectric film having a composition different from the first dielectric film; and

the protective layer overlying the third dielectric layer where the protective layer is at least two films selected from the group consisting of: metal-containing films, which are of different transition metals of Groups 4, 5, 6 or 10 of the Periodic Table of Elements; and silicon-containing films; and metal and silicon films; films of metal and metal-oxy materials; films of metal and silicon oxy-materials; films of silicon and metal-oxy materials; films of silicon and silicon oxy-materials; films of metal oxy and silicon oxy materials; where the oxy-materials are selected from the group of oxides or oxynitrides.

Claim 27 (original) The coated article of claim 26 wherein the first and second dielectric layers are each a zinc stannate film, and the second dielectric film of the third dielectric layer is a zinc stannate film and each of the zinc stannate films has zinc in the weight percent range of 10-90 and tin in the weight percent range of 90-10.

Claim 28 (previously presented) The coated article of claim 27 wherein the first dielectric film of the third dielectric layer has zinc in the weight percent range of equal to and greater than 90 and equal to and less than 60 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 40.

Claim 29 (previously presented) A coated article comprising:

a substrate;

a first dielectric layer over the substrate;

a first infrared reflective layer over the first dielectric layer;

a first primer layer over the first reflective metal layer;

a second dielectric layer having a first dielectric film selected from the group consisting of a zinc oxide, tin oxide film and a first zinc stannate film, and a second dielectric film overlying the first dielectric film having a composition different than the first dielectric film of the second dielectric layer;

a second infrared reflective layer over the second dielectric layer;

a second primer layer over the second reflective layer;

a third dielectric layer over the second metal primer layer, the third dielectric layer having a first dielectric film selected from the group consisting of a zinc oxide, tin oxide film and zinc stannate film, and a second dielectric film, the second dielectric film of the third dielectric layer have a composition different than the composition of the second dielectric film of the third dielectric layer; and

the protective layer overlying the third dielectric layer where the protective layer is at least two films selected from the group consisting of: metal-containing and silicon-containing films, which are different metals, or metal and silicon, or metal and metal-oxy materials, or metal and silicon oxy-materials, or silicon and metal-oxy, or silicon and silicon oxy-materials, or metal oxy and silicon oxy materials, where the oxy materials are selected from the group consisting of oxides and oxynitrides and where the metal is selected from the group consisting of a transition metal of Groups 4, 5, 6 or 10 of the Periodic Table of Elements.

Claim 30 (previously presented) The coated article of claim 29 wherein the first dielectric layer, the second dielectric film of the second and third dielectric layers are each a zinc stannate film having zinc in the weight percent range of 10-90 and tin in the weight percent range of 90 -10.

Claim 31 (previously presented) The coated article of claim 30 wherein the first dielectric film of the second and third dielectric layers are each a zinc stannate film having zinc in the weight percent range of equal to and greater than 90 and equal to and less than 60 and tin in the weight percent range of equal to and greater than 10 and equal to and less than 40.

Claim 32 (previously presented) The coated article of claim 30 wherein the coated article is a transparency.

Claim 33 (previously presented) The coated article of claim 32 wherein the coated article is an automotive transparency.

Claim 34 (previously presented) The coated article of claim 33 wherein the automobile transparency is an automotive windshield having a pair of glass sheets laminated together and one of the sheets is fabricated from the substrate having the coating.

Claim 35 (cancelled)

Claim 36 (previously presented) A coated article comprising:

a substrate;

at least one dielectric layer over the substrate;

at least one infrared reflective layer over the at least one dielectric layer;

optionally a first metal primer layer over the at least one infrared reflective layer;

optionally a second dielectric layer over the first metal primer; and

at least one protective layer selected from (A) a heat convertible metal film wherein the metal is selected from zirconium, niobium, tantalum, chromium, nickel and alloys thereof and alloys with silicon at a thickness for the layer of 15 to 25 Å , (B) at least two films selected from: metal, metal-oxy materials, silicon and silicon oxy-materials where the oxy-materials are selected from oxides and oxynitrides, and where the metal of the at least two films is the same or different and selected from a transition metal of Groups 4, 5, 6 or 10 of the Periodic Table of Elements, or (C) a heat convertible metal film wherein the metal is selected from niobium, tantalum

and alloys thereof and alloys with silicon at a thickness for the layer of 5 to 60 Å wherein the protective layer is located in the stack of layers to provide durability to the stack of layers and wherein the protective layer is not deposited on the optionally a first metal primer layer and the (A) film is deposited over the dielectric layer spaced the greatest distance from the substrate.

Claim 37 (previously presented) A coated article of Claim 36 wherein the dielectric layer is a first dielectric layer and the infrared reflective layer is a first infrared reflective layer and the primer layer is present and further including:

a second dielectric layer over the primer layer,

a second infrared reflective layer over the second dielectric layer;

optionally a primer layer over the second infrared reflective layer; and

the protective layer is an overcoat over the second dielectric layer.

Claim 38 (previously presented) A coated article of Claim 36 wherein the protective layer is a heat convertible metal located on the substrate before the first dielectric layer.

Claim 39 (cancelled)

Claim 40 (previously presented) A coated article of Claim 36 which has a second dielectric layer and wherein the protective layer is a heat convertible metal located between the first dielectric layer and the second dielectric layer below the first reflective layer.

Claim 41 (currently amended) A coated article of Claim 37 wherein the protective layer has at least two films selected from the groups consisting of

(A) metal and silicon and (B) metal oxy-material and silicon oxy-material [[ł]] and the protective layer is located over the second dielectric layer that is on the reflective layer and further comprising a third optional dielectric layer over the protective layer.

Claim 42 (previously presented) A coated article of Claim 1, wherein the protective layer has a thickness for the films of about 5 to about 60 Å for the metal or silicon film and about 20 to about 50 Å, for the metal oxy-material or silicon oxy-material film.

Claim 43 (previously presented) A coated article of Claim 42, wherein the protective layer has a thickness for the films of 10 to about 30 Å for the metal or silicon film and 30 to 40 Å for the metal oxy-material or silicon oxy-material film.

Claim 44 (previously presented) A coated article of Claim 1, wherein the protective layer provides chemical durability.

Claim 45 (previously presented) A coated article of Claim 1, wherein the protective layer provides mechanical durability.